CONTENTS

Page

Michinomae, M., Masuda, H., Siedou, M. and Kito, Y. Structural basis for wavelength discrimination in the banked retina of the firefly squid *Watasenia scintillans* 1

Shaw, S. R. Detection of airborne sound by a cockroach 'vibration detector': a possible missing link in insect auditory evolution 13

Guimaraes, A. C., Herzog, W., Hulliger, M., Zhang, Y. T. and Day, S. Effects of muscle length on the EMG–force relationship of the cat soleus muscle studied using non-periodic stimulation of ventral root filaments 49

Barclay, C. J. Efficiency of fast- and slow-twitch muscles of the mouse performing cyclic contractions 65

Claiborne, J. B., Walton, J. S. and Compton-McCullough, D. Acid–base regulation, branchial transfers and renal output in a marine teleost fish (the long-horned sculpin *Myoxocephalus octodecimspinosus*) during exposure to low salinities 79

Marvão, P., Emílio, M. G., Ferreira, K. G., Fernandes, P. L. and Ferreira H. G. Ion transport in the intestine of *Anguilla anguilla*: gradients and translocators 97

Bevan, R. M., Woakes, A. J., Butler, P. J. and Boyd, I. L. The use of heart rate to estimate oxygen consumption of free-ranging black-browed albatrosses *Diomedea melanophrys* 119

Marsh, R. L. and Olson, J. M. Power output of scallop adductor muscle during contractions replicating the *in vivo* mechanical cycle 139

Kohstall-Schnell, D. and Gras, H. Activity of giant interneurones and other wind-sensitive elements of the terminal ganglion in the walking cricket 157

Pesquero, J., Roig, T., Bermudez, J. and Sanchez, J. Energy metabolism by trout red blood cells: substrate utilisation 183

Browman, H. I. and Hawryshyn, C. W. Retinoic acid modulates retinal development in the juveniles of a teleost fish 191

Gamperl, A. K., Pinder, A. W., Grant, R. R. and Boutilier, R. G. Influence of hypoxia and adrenaline administration on coronary blood flow and cardiac performance in seawater rainbow trout (*Oncorhynchus mykiss*) 209

Loudon, C., Best, B. A. and Koehl, M. A. R. When does motion relative to neighboring surfaces alter the flow through arrays of hairs? 233

Ashley-Ross, M. A. Hindlimb kinematics during terrestrial locomotion in a salamander (*Dicamptodon tenebrosus*) 255

Ashley-Ross, M. A. Metamorphic and speed effects on hindlimb kinematics during terrestrial locomotion in the salamander *Dicamptodon tenebrosus* 285

Chung, J. S., Goldsworthy, G. J. and Coast, G. M. Haemolymph and tissue titres of achetakinins in the house cricket *Acheta domesticus*: effect of starvation and dehydration 307

Walsh, P. J., Wood, C. M., Perry, S. F. and Thomas, S. Urea transport by hepatocytes and red blood cells of selected elasmobranch and teleost fishes 321

SHORT COMMUNICATION

Christie, A. E., Hall, C., Oshinsky, M. and Marder, E. Buccalin-like and myomodulin-like peptides in the stomatogastric ganglion of the crab *Cancer borealis* 337

Information about the Journal